



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,338	06/29/2001	Noriyuki Yamamoto	033808/027 8771	6894

38327 7590 09/10/2004

REED SMITH LLP  
3110 FAIRVIEW PARK DRIVE, SUITE 1400  
FALLS CHURCH, VA 22042

EXAMINER

TRAN, MYLINH T

ART UNIT PAPER NUMBER

2179

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/895,338

**Applicant(s)**

YAMAMOTO ET AL.

**Examiner**

Mylinh T Tran

**Art Unit**

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's Amendment filed 05/17/04 has been entered and carefully considered. Claims 1, 3 and 68 have been amended. Claims 10-12 have been added. However, limitations of amended claims and newly claims have not been found to be patentable over prior art of record, therefore, claims 1-12 are rejected under the same ground of rejection as set forth in the Office Action mailed 02/07/04.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bacus et al. in view of Casavant and further in view of Saito [US. 6,597,383].

As to claim 1, Bacus et al. discloses a computer implemented method and corresponding apparatus for selecting an electrophoresis band of interest from a plurality of bands comprising the steps/means for a display unit for displaying an image of the plurality of bands established on the lane (figure 1, 24); a region setting unit for setting a region on the lane on a screen of the display unit (figure 1, 30); selection candidate displaying unit for displaying bands within the

Art Unit: 2179

region in a selection candidate state; (figure 14-14A, 30, column 5, lines 5-15); and a band selecting unit for processing the bands in the selection candidate state to be in a selection state (column 9, lines 1-40). The differences between Bacus et al. and the claim is an electrophoresis band. Casavant shows the feature at column 8, lines 40-57. It would have been obvious to one of ordinary skill in the art, having the teachings of Bacus et al. and Casavant before them at the time the invention was made to modify the concept of selecting the image region of interest as taught by Bacus et al. to include the analyzing the electrophoresis object of Casavant, in order to provide users a quick way to select a desired electrophoresis gel as taught by Casavant. While Bacus in view of Casavant discloses the region setting unit sets the region on the lane by setting an input cursor of a pointing unit on the lane at the center (column 5, lines 1-20), they do not teach the press of a predetermined key of a keyboard. Saito teaches the feature at column 3, lines 1-10. Also, Bacus in view of Casavant shows the region unit of coverage size and a display size (Bacus, figure 14). Although Bacus and Casavant do not teach the altering unit for altering the coverage size and a display size, Saito teaches the altering unit at column 3, lines 1-10, once user presses the predetermined key of the keyboard of the computer, the size of the area including the image data to make the position of the pointer standing out). It would have been obvious to one of ordinary skill in the art, having the teachings of Bacus et al., Casavant and Saito before them at the time the invention was made to modify the concept of

Art Unit: 2179

selecting the image region of interest of electrophoresis get as taught by Bacus et al. and Casavant to include the concept of altering the size of the region by pressing the predetermined key of the keyboard of Saito, with the motivation provide an efficient and quick way to change sizes of the setting unit as taught by Saito.

As to claims 2, 5-6 and 11, Saito in view of Bacus and Casavant show the region setting unit sets the region on the lane by setting an input cursor of a pointing unit on the lane at the center, and the region altering unit alters the size of the region in accordance with the press of a predetermined key of a keyboard (column 3, lines 1-34).

As to claims 3, 7, 10 and 12, Bacus et al. shows a band information displaying unit for displaying the number of bands in the selection candidate state relative to the region (figure 1, 2, column 5, lines 1-15).

As to claim 4, the claim is analyzed as previously discussed with respect to claim 1 except for the part of "a selection candidate display altering unit for altering the band in the selection candidate state to a band immediately before or after the former band along the lane". Bacus et al. suggests the feature by citing "any selected region of interest in the macro image has locations to which the microscopic stage may be automatically repositioned under a changed..." (column 5, lines 10-15).

As to claims 8 and 9, the claim is analyzed as previously discussed with respect to claim 5 except for the part of "setting a region on the lane based on an input

cursor of a pointing unit placed on the display of the lane having a plurality of bands". Bacus et al. shows the feature by citing "the user selects by a marker such as a cursor the defined area of interest of region and then views higher magnification images or has them analyzed" (abstract).

### **Response to Arguments**

Applicant has argued that none of the references teach or suggest "a region altering unit for altering a coverage size and a display size of the region on an electrophoresis lane" and "a selection candidate display altering unit for altering the band in the selection candidate state to a band immediately before or after the former band along the lane". However, Applicant's attention is directed to column 3, lines 1-34 of Saito's system "...and changes the size of the area including the image data to be changed at a predetermined constant interval to make the position of the pointer stand out, in the case that the user depresses a predetermined key of the keyboard of the computer to make the position of the pointer stand out or the user does not perform any input operation to the computer during a predetermined period", while Bacus in view of Casavant discloses the region setting unit sets the region on the lane by setting an input cursor of a pointing unit on the lane at the center. The Examiner relies on three references for the limitations while Applicant relies on one reference at a time for the whole limitation. Therefore, in combination of Bacus and Saito, the method and system of "a region altering unit for altering a coverage size and a display size of the region on an electrophoresis lane" and "a selection candidate

Art Unit: 2179

display altering unit for altering the band in the selection candidate state to a band immediately before or after the former band along the lane” are taught. Also, the motivations to combine the references are provided above.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Conclusion***

Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231. If applicant desires fax a response, (703) 872-9306 for all kind of communications. NOTE, A Request for Continuation (Rule 60 or 62) cannot be faxed.

Art Unit: 2179

Please label "PROPOSED" or "DRAFT" for information facsimile communications. For after final responses, please label "AFTER FINAL" or "EXPEDITED PROCEDURE" on the document.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mylinh Tran whose telephone number is (703) 308-1304. The examiner can normally be reached on Monday-Thursday from 8.00AM to 6.30PM

If attempt to reach the examiner by telephone are unsuccessful, the examiner 's supervisor, Heather Herndon, can be reached on (703) 308-5186,

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.

Mylinh Tran

Art Unit 2179

BA HUYNH  
PRIMARY EXAMINER